HEALEY-DIRESTA POLYMERIZED ANTI-RESORPTIVE BONE-CEMENT

NTI-RESORPTIVE BONE CEMENTS AND ALLOGENEIC, AUTOGRAFIC, AND XENOGRAFIC BONE GRAFTS U.S. Serial No. 09/890,116, filed November 20, 2001

Obtain a bone-cement based on the desired application.

Determine the particle-size distribution of the dry/particulate polymer component of the bone-cement.

Obtain the appropriate anti-resorptive agent(s) in the form of particles, based on its temperature stability, hydration state, application, etc.

Grind the anti-resorptive agents and/or sift the anti-resorptive agents through the appropriately sized mesh screens to obtain particles that have the same or smaller particle-size distribution as the polymer component.

Determine the amount of the anti-resorptive agent required or to be added without affecting the biomechanical properties of the bone-cement.

Determine or obtain the elution profile of anti-resorptive agents from the polymerized drug-cement matrix

Mix the anti-resorptive agent with polymer component of the bone cement

Mix the drug-polymer component with the monomer component

Polymerized Anti-Resorptive Bone-cement